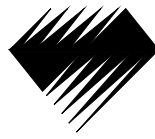


SERVICE BULLETIN



Diamond
AIRCRAFT

Service Bulletin No.: DA20-27-07 Rev. 0

Date Issued: April 21, 1997

Title: Rudder Pedal Adjust System

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1. ATA Code: 2720

PLANNING INFORMATION:

2. Effectivity: DA20-A1 aircraft S/N 10002 up to and including S/N 10300.

3. General: This service bulletin addresses the installation of a new rudder pedal adjustment system and the removal of the existing system. A new shorter cable is installed relocating the pull handle to the pedal assembly. The shorter cable run decreases system friction resulting in improved operation and better maintainability.

4. Compliance: Optional.

5. Approval: Engineering data referenced or contained in this bulletin is approved as part of the type design.

6. Labor: Approximately 4 man hours will be required to complete this service bulletin.

7. Material:	Description	Part Number	Qty
	Latch, Rudder Pedal	20-2722-28-00	2
	Adjust Cable	20-2700-21-00	2
	Spring, Recoil	20-2700-20-02	4
	Pin, Cotter	24665-153	2
	Spring, Strain Relief	20-2700-20-04	2

The above materials are available as DA20-27-07AMK0.

Materials required but not supplied:
DP110 Epoxy Adhesive (or equivalent 5 minute epoxy)
Loctite 222 Threadlocker
Acetone or equivalent

8. Special Tools: None

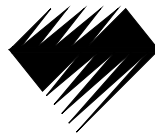
9. References: DA20 Maintenance Manual Doc. # DA201.



10. Accomplishment Instructions:

- 10.1 Remove the springs on the rudder pedals.
- 10.2 Cut the existing adjustment cable forward of the aft rudder pedal bracket and pull the cable out through the handle end.
- 10.3 Remove the handle from the cable and retain for reinstallation.
- 10.4 Remove the aft rudder pedal bracket by removing the two mounting bolts. For aircraft with the cable guide tube located beneath the floor, the forward guide tube and slip collar will also need to be removed.
- 10.5 Remove the flexible case and attaching fittings on aircraft with the cable guide tube running on top of the floor. Cut the guide tube off in two locations where the tube protrudes through the floor on aircraft where the existing cable runs beneath the floor.
- 10.6 Slide the rudder pedal assembly aft off of the sledge tubes to increase access to the latch.
- 10.7 Remove the existing latch (discard), cotter pin (discard), clevis pin (retain) and washer (retain).
- 10.8 Install the new latch as the previous was installed. Refer to Figure 1.
- 10.9 Hook the recoil springs to the rudder cable brackets and cable assembly as shown in figure 1.
- 10.10 Slide the rudder pedal assembly back onto the sledge tubes and feed the adjust cable through the latch and latch frame hole.
- 10.11 Drill open the 1/4" hole in the aft rudder pedal bracket to 5/16". **Do not drill the hole deeper than its' current depth.** Drill the \varnothing 4mm hole (forward step) through with a #10 drill.
- 10.12 De-grease the hole in the aft rudder pedal bracket and strain relief spring with acetone or equivalent.
- 10.13 Apply a sufficiently large amount of DP110 (or other equivalent 5 minute epoxy adhesive) to the hole and outside diameter of the strain relief spring. Insert the spring into the 5/16" hole in the aft mount block and clean off the excess adhesive. Wait 30 minutes before handling and 2 hours before operating the system.

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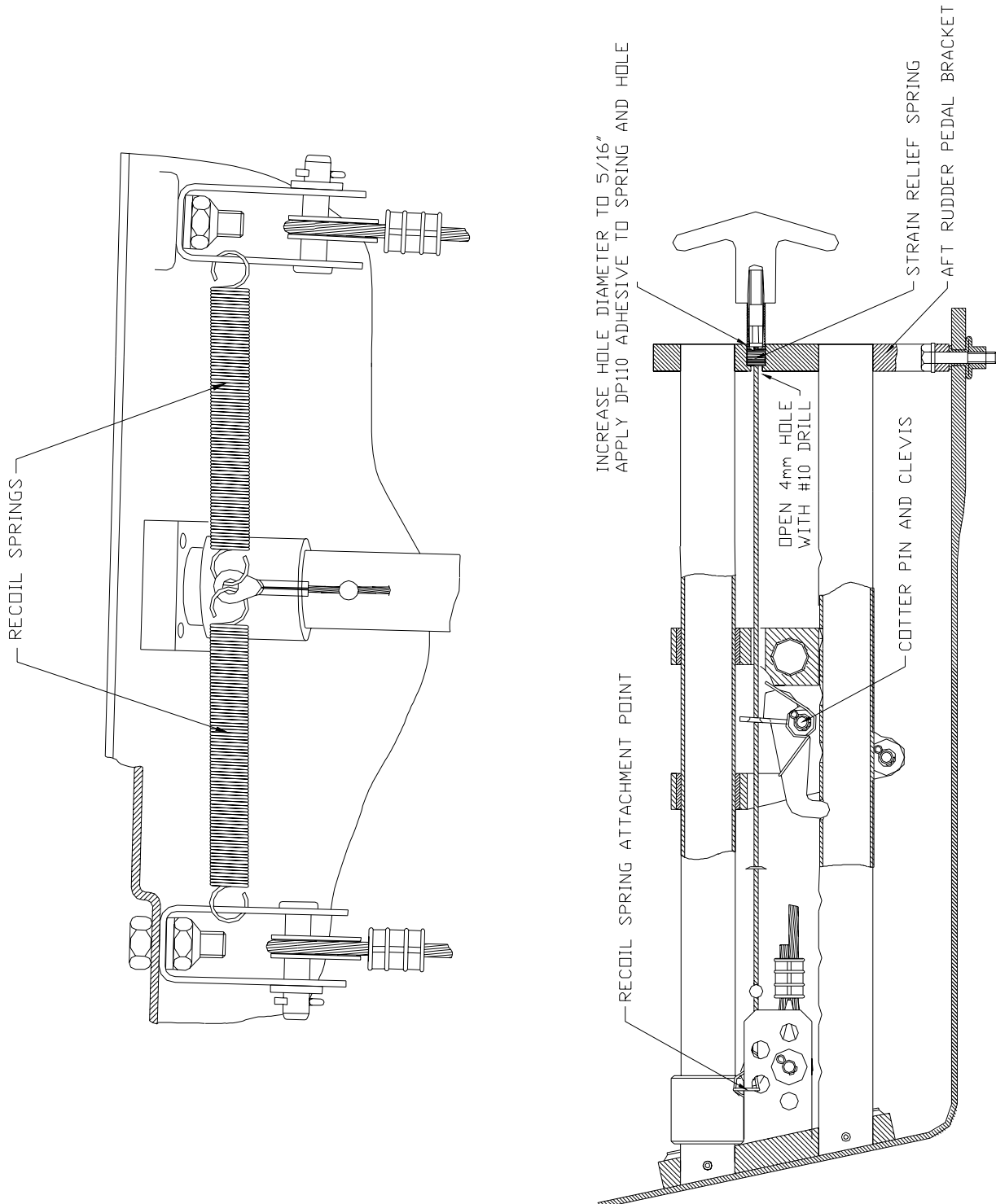
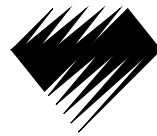


Figure 1

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10. Accomplishment Instructions: (Continued)

- 10.14 Seal the holes in the floor left by the removed parts. Use an epoxy body filler or equivalent material. Paint over the repair area.
- 10.15 Reinstall the aft rudder pedal bracket. Thread the end of the adjust cable through the aft rudder pedal bracket and spring.
- 10.16 Position the pedals at an intermediate adjustment position.
- 10.17 Screw on the handle until bottomed. Use loctite 222 service removable threadlocker to lock the handle to the threads.
- 10.18 Attach the rudder pedal springs removed in step 1. Position the rudder pedal assembly in the forward most detent. Ensure that the latch is engaged. If the latch cannot be engaged in the forward most position shorten the strain relief spring by cutting a few rings off.
- 10.19 With the pedals in the forward most position (forward of the most forward detent against the stop spacer), check the freedom of the handle at the strain relief spring. With pressure applied to the handle it should deflect freely and retract fully without generating undue tension in the adjust cable. Cut off rings of strain relief spring for minor adjustment as required.

11. Weight and Balance: Negligible.

12. Electrical Load Data: Not applicable.

13. Credit: Contact the Diamond Aircraft Customer Support Department for information regarding price and availability.

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin.